

PV-Guard Module-Level Rapid Shutdown and Monitoring

northernep.com



Features

- Module level rapid shutdown
- Module level monitoring for service (option)
- IV curve trace operating mode
- Over temperature protection (auto RSD function)
- Optional enclosure for controller and data logger
- Certified for PVRSS with multiple inverters and for stand-alone independent RSD system



Auto shut-down whole PV site BEFORE fire or smoke



Compatible with SunSpec control signaling



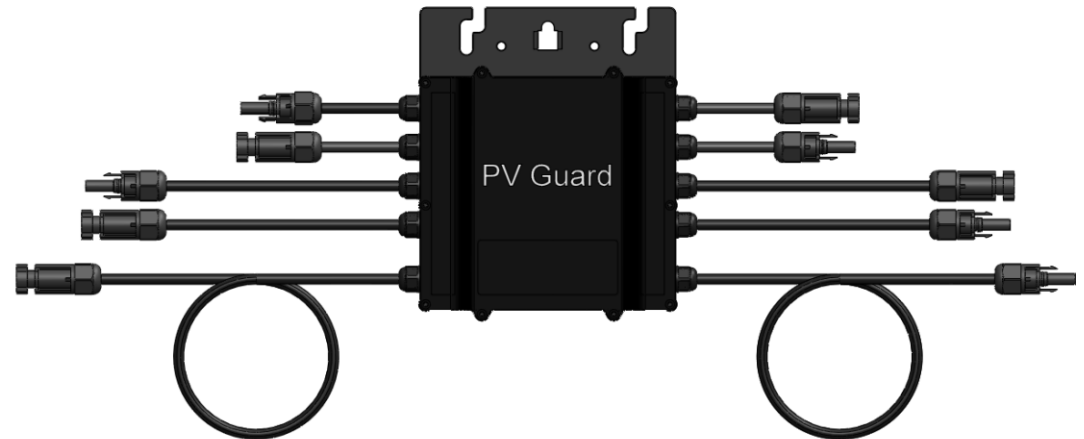
Cable harness options to comply with NEC-2020



Suitable for all commercial or residential applications



Multiple US patents pending

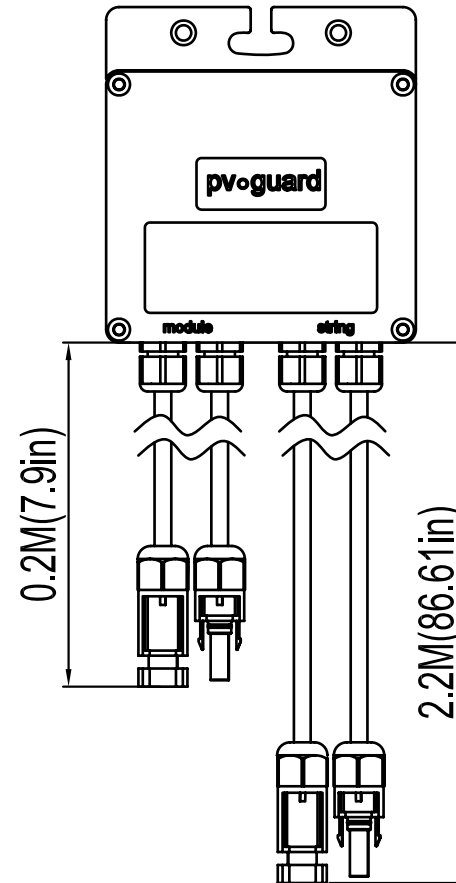


Four configurations to perfectly fit PV string multiples;
PVG-1 / PVG-2 / PVG-3 / PVG-4



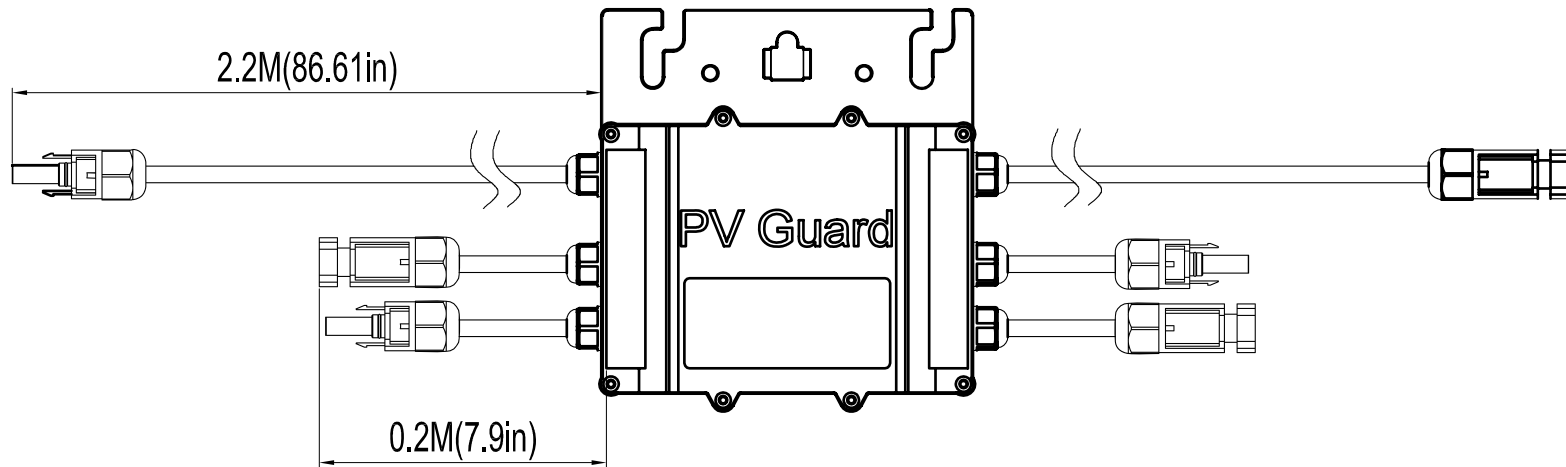
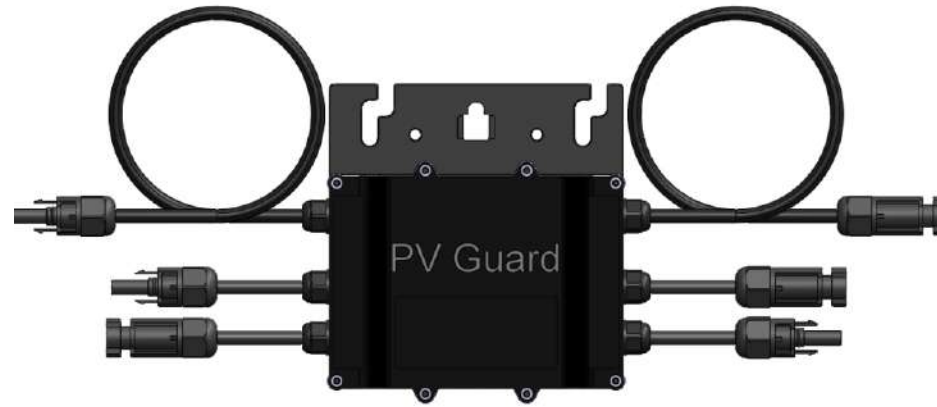
PVG Receivers

PVG-1- L



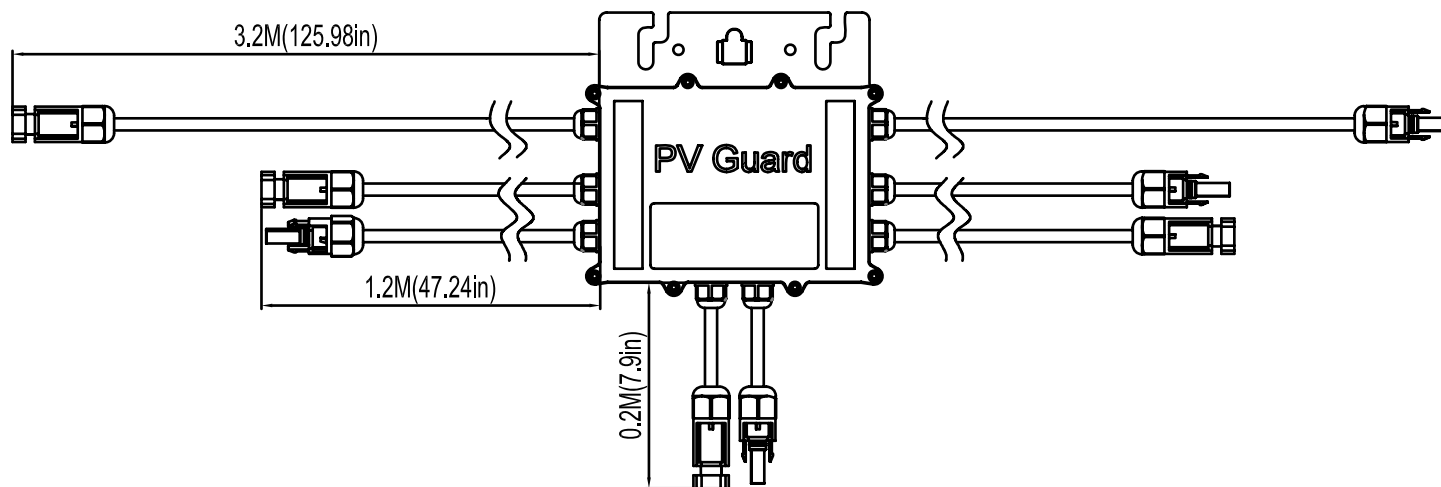
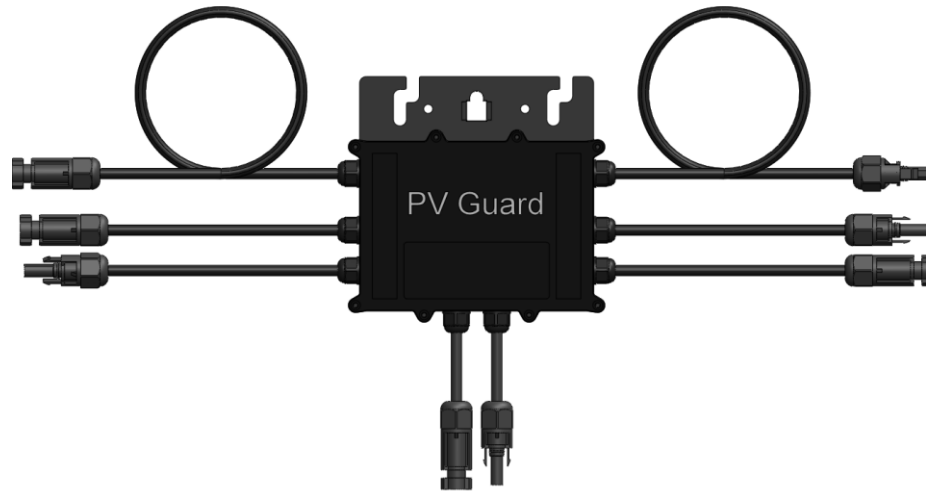
* Contact NEP for other cable lengths and connector configurations

PVG-2-L



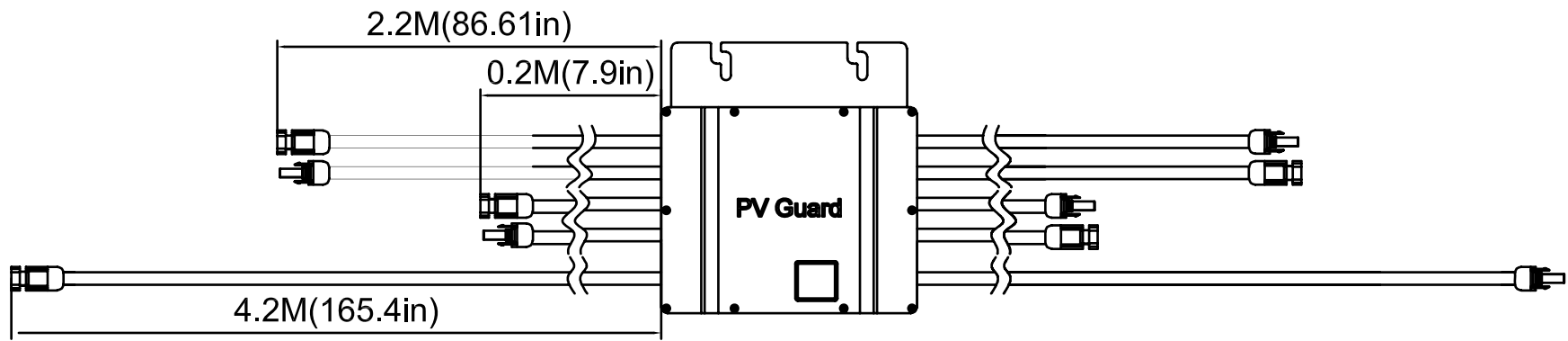
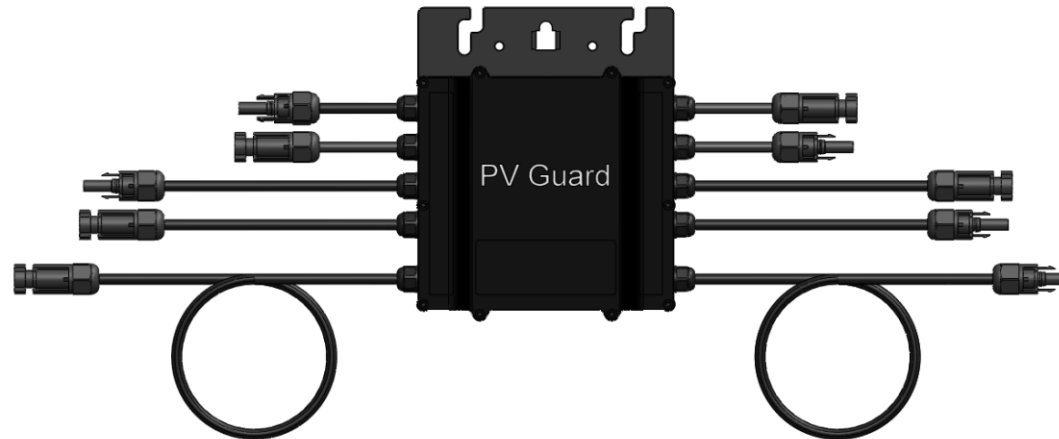
* Contact NEP for other cable lengths and connector configurations

PVG-3-L



* Contact NEP for other cable lengths and connector configurations

PVG-4-L



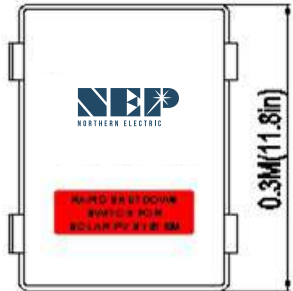
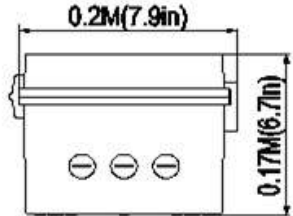
* Contact NEP for other cable lengths and connector configurations

PANEL LEVEL
RECEIVER
DEVICES
PVG-1
PVG-2
PVG-3
PVG-4

INPUT(DC)	Max DC Open Circuit Voltage per Input (Vdc)	90
	Max DC Current per input (Adc)	15
OUTPUT(DC)	Maximum Output Voltage (Vdc)	$V_{oc} * n$ (n=1/2/3/4)
SYSTEM	Maximum System Voltage (Vdc)	1500
MECHANICS	PV Cable	12AWG
	PV Connectors	Mc4 (Contact NEP for other connectors options)
	Size (not including PV cable)	5.12' x 4.73' x 1.14' (PVG-1) 5.90' x 5.71' x 1.00' (PVG- 2, PVG-3) 10.5' x 8.25' x 1.25' (PVG-4)
	Protection Degree	NEMA 6
	Operating Ambient Temperature	-40°C--+85°C
	Mounting Method	Rail, Frame (option)
SIGNAL	Communications	DC Power Line Compatible with SunSpec signaling
CERTIFICATION	Product Safety Compliance	UL 1741 CSA C22.2 No. 107.1 NEC 2014/2017 690.12 Canada CEC 2015 64-218

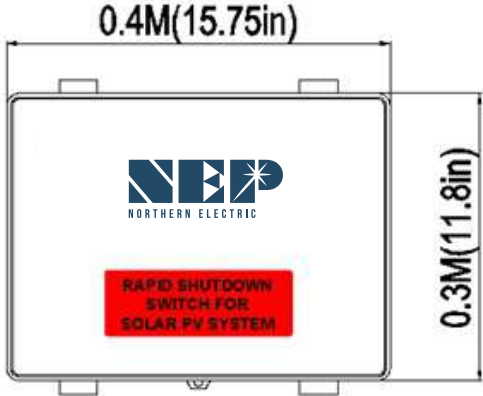
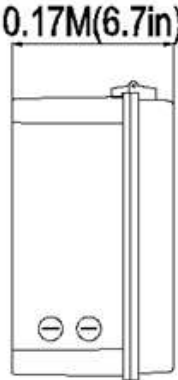
PVG Controller

PVG-E



Size: 200 x 300 x 170 (mm)
7.9 x 11.8 x 6.7 (in)

PVG-O



* Includes Gateway

Size: 400 x 300 x 170 (mm)
15.79 x 11.8 x 6.7 (in)

PVG-E

POWER SUPPLY	AC Input	100 - 480 Vac. 200mA, 50/60 Hz
SYSTEM	Maximum System Voltage (Vdc)	1500
MECHANICS	Size	7.9'x11.8'x6.7'
	Protection Degree	IP65
	Operating Ambient Temperature	-20C----- +85C
SIGNAL	Communications	DC Power Line, Compatible with SunSpec
CERTIFICATION	Product Safety Compliance	UL 1741 CSA C22.2 No. 107.1 NEC 2014/2017 690.12 Canada CEC 2015 64-218
CONTROLS	Optional Controls	On-Grid / Off-Grid Primary / Secondary 5Vdc output for relay Optional built-in E-Stop

PVG-O (PANEL LEVEL MONITORING)

POWER SUPPLY	AC Input	100 - 480 Vac. 200mA, 50/60 Hz
SYSTEM	Maximum System Voltage (Vdc)	1500
MECHANICS	Size	15.79'x11.8'x6.7'
	Protection Degree	IP65
	Operating Ambient Temperature	-20C----- +85C
SIGNAL	Communications	DC Power Line, Compatible with SunSpec
CERTIFICATION	Product Safety Compliance	UL 1741 CSA C22.2 No. 107.1 NEC 2014/2017 690.12 Canada CEC 2015 64-218
MONITORING	Optional Monitoring	Panel-by-Panel with BDG-256